



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
07/110,791	10/21/87	KING	C 50227

18M2/0918  
NEEDLE & ROSENBERG, P.C. SUITE 1200  
THE CANDLER BUILDING  
127 PEACHTREE STREET, N.E.  
ATLANTA GEORGIA 30303

MARSCO EXAMINER	
ART UNIT	PAPER NUMBER
18017	51

DATE MAILED:

09/18/96

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

# INTER FERENCE INITIAL MEMORANDUM

**BOARD OF PATENT APPEALS AND INTERFERENCES:** An interference is found to exist between the following cases:

This interference involves \_\_\_\_\_ parties

PARTY <b>KING ET AL</b>	APPLICATION NO. <b>07/110,791</b>	FILING DATE <b>10/21/87</b>	PATENT NO., IF ANY _____	ISSUE DATE, IF ANY _____
If application has been patented, have maintenance fees been paid? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maintenance fees not due yet				
**Accorded the benefit of:				
COUNTRY <b>US</b>	APPLICATION NO. <b>06/836,414</b>	FILING DATE <b>3/5/86</b>	PATENT NO., IF ANY _____	ISSUE DATE, IF ANY _____
The claim(s) of this party which correspond(s) to this count is(are): <b>PATENTED OR PATENTABLE PENDING CLAIMS</b> <b>44, 46, 47, and 60-62</b>		UNPATENTABLE PENDING CLAIMS _____		
The claim(s) of this party which does(do) not correspond to this count is(are): <b>PATENTED OR PATENTABLE PENDING CLAIMS</b>		UNPATENTABLE PENDING CLAIMS _____		

PARTY <b>SLAMON ET AL</b>	APPLICATION NO. <b>06/948265</b>	FILING DATE <b>12/31/86</b>	PATENT NO., IF ANY <b>4,968,603</b>	ISSUE DATE, IF ANY <b>11/6/90</b>
If application has been patented, have maintenance fees been paid? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maintenance fees not due yet				
**Accorded the benefit of:				
COUNTRY	APPLICATION NO.	FILING DATE	PATENT NO., IF ANY	ISSUE DATE, IF ANY
The claim(s) of this party which correspond(s) to this count is(are): <b>PATENTED OR PATENTABLE PENDING CLAIMS</b> <b>1-22</b>		UNPATENTABLE PENDING CLAIMS _____		
The claim(s) of this party which does(do) not correspond to this count is(are): <b>PATENTED OR PATENTABLE PENDING CLAIMS</b>		UNPATENTABLE PENDING CLAIMS _____		

## Instructions

1. For every patent involved in the interference, check if the maintenance fees have been paid by using the patent number with PALM screen 2970. If fees are due and they have not been paid, the interference cannot be declared since it would involve an expired patent (35 USC 135(a); 37 CFR 1.606).
2. For each party, identify the patentable (or patented) and unpatentable (pending) claims which correspond to the count (37 CFR 1.601(f), (n); 1.609(b)(2)).
3. For each party, identify the patentable (or patented) and unpatentable (pending) claims which do not correspond to the count (37 CFR 1.609(b)(3)).
4. Forward all files including those the benefit of which is being accorded.
5. Keep a copy of the Interference Initial Memorandum and any attachments for your records.

**All information requested below must be attached on (a) separate typewritten sheet(s).**

6. On a separate sheet, set forth a single proposed interference count. If any claim of any party is exactly the same word for word as this count, please indicate the party, application or patent number, and the claim number.
7. For each claim designated as corresponding to the count, provide an explanation of why each claim defines the same patentable invention as the count (37 CFR 1.609(b)(2)).
8. For each claim designated as not corresponding to the count, provide an explanation of why each claim defines a separate patentable invention from the count (37 CFR 1.609(b)(3)).
9. For each additional count, if any, repeat steps 2-6 and, additionally, provide an explanation why each count represents a separate patentable invention from every other count (37 CFR 1.609(b)(1)).

DATE <b>9/16/96</b>	PRIMARY EXAMINER (Signature) <i>Andi V. Marschall</i>	TELEPHONE NO. <b>(703) 308-3894</b>	ART UNIT <b>1807</b>
DATE	GROUP DIRECTOR SIGNATURE (if required)		

\*\*The application number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient to merely list the earliest application if there are intervening applications necessary for continuity.

**THIS PAGE CAN BE DUPLICATED IF THERE ARE MORE THAN TWO INTERFERING PARTIES.**

*8/21/97*

Interference summary for 07/110,791 versus P/N 4,968,603.

Proposed phantom count: (combination of claim 44 of 07/110,791 and claim 1 of P/N 4,968,603)

A method of diagnosing or evaluating human cancer in a patient comprising: measuring the level of amplification in a tissue or tumor sample containing cells from said patient or increased expression of a MAC117 gene in a body sample from said patient, the presence of amplification or increased expression of said MAC117 gene indicating the presence of cancer or a cancer with a more malignant phenotype

OR

A method for screening patients to determine disease status, said method comprising: measuring the level of amplification or expression of the HER-2/neu gene in a sample from a patient suffering from breast or ovarian adenocarcinoma; and classifying those patients having an increased level of amplification or expression of the HER-2/neu gene relative to a reference level characteristic of normal cells as being more likely to suffer disease relapse or having a decreased chance of survival.

(Note that the Her-2/neu gene and the MAC117 gene are the same gene as summarized in P/N 4,968,603 in column 2, lines 39-43.)

All of the claims of 07/110,791 and P/N 4,968,603 correspond to the count in that they all are directed to evaluation, diagnosis, screening, or evaluation of cancer treatment as directly related procedures in that they are all based on the

analysis of the same gene regarding whether it is amplified, rearranged, or overexpressed in the tissue being tested. Such amplification, rearrangement, or overexpression being indicative of cancer diagnosis or when expressed regarding extent of gene alteration as indicative of a worsening condition of the patient whether being treated or not.

*Ardin H. Marschel*

ARDIN H. MARSCHEL  
PATENT EXAMINER  
GROUP 1600



FILING RECEIPT

**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
06/836,414	03/05/86	127	\$ 340.00	49567	4	10	3

HOLMAN & STERN  
2401 15TH ST., N. W.  
WASHINGTON, DC 20009

Receipt is acknowledged of the patent application identified herein. It will be considered in its order and you will be notified as to the examination thereof. Be sure to give the U.S. SERIAL NUMBER, DATE OF FILING, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this transmittal.

Applicant(s) C. RICHTER KING, WASHINGTON, DC; MATTHIAS H. KRAUS,  
CHEVY CHASE, MD; STUART A. AARONSON, GREAT FALLS, VA.

FOREIGN FILING LICENSE GRANTED 04/10/86

TITLE

HUMAN GENE RELATED TO BUT DISTINCT FROM EGF RECEPTOR GENE

(see reverse)